

CLAIMS

What is claimed is:

1. A cell expressing E1A and E1B proteins of an adenovirus, said cell comprising recombinant nucleic acid encoding an IgA molecule in expressible format.
2. The cell of claim 1, wherein said cell is a human cell.
3. The cell of claim 1, wherein said cell is derived from a retina cell.
4. The cell of claim 1, wherein said cell is derived from a primary cell.
5. The cell of claim 1, wherein said cell is derived from a cell deposited under ECACC number 96022940.
6. The cell of claim 1, wherein said cell comprises between one and twenty copies of said recombinant nucleic acid encoding the IgA molecule.
7. The cell of claim 1, wherein said IgA molecule is a human IgA molecule.
8. The cell of claim 1, wherein said IgA molecule has a constant region comprising amino acids 137 to 489 of SEQ. ID. NO. 3.
9. The cell of claim 1, wherein said cell, when seeded at 0.5×10^6 cells/well and cultured in 6-well tissue culture plates at 37°C in DMEM with 10% serum under an atmosphere containing 10% CO₂, produces at least 5 pg IgA/seeded cell/day.

10. The cell of claim 9, wherein said cell, when seeded at 0.5×10^6 cells/well and cultured in 6-well tissue culture plates at 37°C in DMEM with 10% serum under an atmosphere containing 10% CO₂, produces at least 20 pg IgA/seeded cell/day.

11. The cell of claim 10, wherein said cell, when seeded at 0.5×10^6 cells/well and cultured in 6-well tissue culture plates at 37°C in DMEM with 10% serum under an atmosphere containing 10% CO₂, produces at least 40 pg IgA/seeded cell/day.

12. A method for recombinant production of an IgA molecule, said method comprising:

culturing a cell expressing E1A and E1B proteins of an adenovirus, wherein said cell comprises recombinant nucleic acid encoding an IgA molecule in expressible format, and expressing said recombinant nucleic acid encoding an IgA, thus producing an IgA molecule.

13. The method according to claim 12, wherein said cell is a human cell.

14. The method according to claim 12, wherein said cell has from one to twenty copies of said recombinant nucleic acid encoding the IgA molecule.

15. The method according to claim 12, wherein said IgA molecule is a human IgA molecule.

16. The method according to claim 12, wherein said IgA molecule has a constant region comprising amino acids 137 to 489 of SEQ. ID. NO. 3.

17. The method according to claim 12, wherein said cell is seeded at 0.5×10^6 cells/well and cultured in 6-well tissue culture plates at 37°C in DMEM with 10% serum under an atmosphere containing 10% CO₂, thus producing at least 5 pg IgA/seeded cell/day.

18. The method according to claim 12, wherein said cell is seeded at 0.5×10^6 cells/well and cultured in 6-well tissue culture plates at 37°C in DMEM with 10% serum under an atmosphere containing 10% CO₂, thus producing at least 20 pg IgA/seeded cell/day.

19. The method according to claim 12, wherein said cell is seeded at 0.5×10^6 cells/well and cultured in 6-well tissue culture plates at 37°C in DMEM with 10% serum under an atmosphere containing 10% CO₂, thus producing at least 40 pg IgA/seeded cell/day.

20. A process for recombinantly producing a human IgA molecule, said process comprising:

culturing a human cell expressing E1A and E1B proteins of an adenovirus, wherein said cell comprises recombinant nucleic acid encoding a human IgA molecule in expressible format, and

expressing said recombinant nucleic acid encoding an IgA,
thus producing a human IgA molecule.